



DEPARTMENT OF TRANSPORTATION

Federal Transit Administration

Fiscal Year (FY) 2021 Competitive Funding Opportunity: Standards Development for Bus Exportable Power Systems (BEPS)

AGENCY: Federal Transit Administration (FTA), Department of Transportation (DOT).

ACTION: Notice of funding opportunity.

SUMMARY: The Federal Transit Administration (FTA) announces the opportunity to apply for a total of \$1,000,000 of Fiscal Year (FY) 2021 Technical Assistance and Workforce Development Program funds for projects that develop interoperable standards for Bus Exportable Power Systems (BEPS). BEPS enable public transportation agencies, communities, and States to access resilient and flexible power options through bus fleet vehicles during major power disruptions. Communities and States often need options for generating power immediately after natural disasters. BEPS technologies developed under previous FTA research grants may have the ability to address this type of challenge by transforming hybrid electric and fuel cell buses into mobile power generators. The goal of this program is to develop national interoperable BEPS standards – working with FTA, industry stakeholders and technical partners – so that different manufacturers’ systems can use the same technology base and applications for BEPS solutions. One or more projects will be competitively selected based on the criteria outlined in this Notice of Funding Opportunity (NOFO).

DATES: Complete proposals must be submitted electronically through the GRANTS.GOV “APPLY” function by 11:59 PM Eastern time on [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Prospective applicants should initiate the process by registering on the GRANTS.GOV website promptly to ensure completion of the application process before the submission deadline. Instructions for applying can be found on FTA’s website at

<http://www.transit.dot.gov/howtoapply> and in the “FIND” module of GRANTS.GOV. The

funding opportunity ID is FTA-2022-005-TRI-SDBEPS. Mail and fax submissions will not be accepted.

FOR FURTHER INFORMATION CONTACT: Raj Wagley, FTA Office of Research, Demonstration, and Innovation, 202-366-5386, raj.wagley@dot.gov.

SUPPLEMENTARY INFORMATION:

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A. Program Description

Under FTA's Technical Assistance and Workforce Development Program (49 U.S.C. 5314), FTA may make grants, or enter into contracts or cooperative agreements, for the development of voluntary and consensus-based standards and best practices for the public transportation industry. This NOFO (Federal Assistance Listing:20.531) was developed under this authority. As requested by the Report of the Appropriations Committee of the U.S. House of Representatives (H. Rpt. 116-452, Jul. 16, 2020) accompanying the Consolidated Appropriations Act, 2021 (Pub. L. 116-260), FTA will competitively fund a total of not less than \$1,000,000 in one or more cooperative agreements to develop interoperable national standards for Bus Exportable Power Systems (BEPS) by collaborating with industry stakeholders and technical partners. These standards must facilitate public transportation agencies, communities, and States' use of resilient and flexible power options after natural disasters or any major power disruption.

Expected components of this BEPS interoperable standards development project include, but are not limited to: completion of an industry literature review on BEPS assessing system parameters, specifications, past results and recommendations; technology scans, surveys or case studies with transit agencies with experience utilizing BEPS; standards development; demonstration of a plug-and-play BEPS system that includes minimum specifications and parameters for interoperability; and a guide to implementing a BEPS system using these standards. Applicants must describe how they will work with transit industry stakeholders, industry working groups and transit standard development organizations – including emergency management agencies – in developing guidance and standards that promotes nationwide adoption of BEPS.

This standards development program will build upon prior FTA investment in projects such as FTA Report 0146 – BEPS System Use Strategy: Investigating the Use of Transit Buses as Emergency Generators (<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/147716/bus-exportable-power-supply-system-use-strategy-investigating-use-transit-buses-emergency-generators.pdf>).

FTA will competitively award one or more cooperative agreements to selected eligible applicants to advance the development of BEPS standards for hybrid electric and fuel cell transit buses, as described in this notice.

B. Federal Award Information

This notice makes available not less than \$1,000,000 for cooperative agreements as authorized under FTA's Technical Assistance and Workforce Development Program (49 U.S.C. 5314) to support the development of voluntary and consensus-based standards and best practices by the public transportation industry. The House Appropriations Committee Report (H. Rpt. 116-452) accompanying the Consolidated Appropriations Act, 2021 (Pub. L. 116-260) requested FTA to use \$1,000,000 of available funds for competitive awards to develop interoperable BEPS standards and provide guidance for hybrid, electric, and fuel cell transit bus manufacturers and

public transit agencies that advances widespread design and use of BEPS systems in communities and States during emergencies and natural disasters.

FTA may cap the amount a single recipient may receive as part of the selection process. Due to funding limitations, applicants that are selected for funding may receive less than the amount originally requested. Only proposals from eligible recipients for eligible activities will be considered for funding.

Pre-award authority is subject to FTA approval and is only available for costs incurred after the announcement of project selections on FTA's website.

Projects under this competition are for standards development efforts and, as such, FTA Circular 6100.1E (available at <https://www.fta.dot.gov/regulations-and-guidance/fta-circulars/research-technical-assistance-and-training-program>) guidance will apply in administering the program.

An applicant whose proposal is selected for funding will receive a cooperative agreement with FTA, to be administered according to Circular 6100.1E, and as set forth in 31 U.S.C. 6305. FTA will have substantial involvement in the administration of the cooperative agreement. FTA's role will include the right to participate in decisions to redirect and reprioritize project activities, goals, and deliverables.

C. Eligibility Information

1. Eligible Applicants

Eligible applicants under this notice include the following:

- Providers of public transportation, including public transportation agencies, State or local government DOTs, and federally recognized Indian tribes;
- Private for-profit and not-for-profit organizations, or consultants;
- State, city, or local government entities, including multi-jurisdictional partnerships, and organizations such as Metropolitan Planning Organizations;

- Other organizations, including research consortia, not-for-profit industry organizations, and institutions of higher education, including large research universities, particularly those with Minority Serving Institution status; or
- Standard Development Organizations (SDOs).

On the application form, eligible applicants are encouraged to identify one or more project partners with a substantial interest and involvement in the project activities or objectives to participate in the implementation of the project.

If an application that involves such a partnership is selected for funding, the competitive selection process will be deemed to satisfy the requirement for a competitive procurement under 49 U.S.C. 5325(a) for the named entities. Applicants are advised that any changes to the proposed partnership after the award will require FTA written approval and must be consistent with the scope of the approved project. Post-award changes usually will be subject to ordinary procurement standards.

The applicant must be able to carry out the proposed agreement and procurements, if needed, with project partners in compliance with all applicable Federal, State, and local laws. To be considered eligible, applicants must be able to demonstrate the requisite legal, financial, and technical capabilities to receive and administer Federal funds under this program.

2. Cost Sharing or Matching

The eligible Federal share for this program is 100 percent. No non-Federal cost sharing is required; however, proposers may offer a non-Federal share of costs. For guidance related to cost sharing, please see FTA Circular 6100.1E.

3. Eligible Projects

This notice solicits applications to develop interoperable national standards for BEPS systems that allow transit agencies, communities and States to use hybrid electric, or fuel cell transit buses as mobile power generators to power facilities such as hospitals or other facilities in emergency and disaster situations. A critical component for these projects is collaboration across

Federal, State, and local governments, public utilities, and the private sector. Thus, FTA seeks applications for projects that enhance the current state of bus exportable power systems or build on existing successful projects and partnership efforts on BEPS.

Eligible activities include all activities leading to development of interoperable national BEPS standards and the development of a guidebook to implement such standards, including, but not limited to, system design and demonstration of portable units; industry survey and data collection on existing BEPS systems; system specifications and standards development; innovations for providing more effective and efficient BEPS systems using public-private partnerships with non-traditional transportation providers; stakeholder collaboration convenings; literature reviews or case studies on BEPS systems; surveys on BEPS systems in other industries that could be applicable to public transit BEPS systems; data collection and analytics; establishing various use cases for BEPS deployment needs; defining system requirements; modeling and simulation; development, validation and verification of the specification; and development of industry guidelines and a guidebook for BEPS solutions that can be shared with the transit industry, including hybrid, electric, and fuel cell transit bus manufacturers.

Standards or guidelines developed will be disseminated to public transit agencies and battery electric bus manufacturers for their use. Standards or guidelines developed under this program must facilitate interoperable, adaptable, secure, and seamlessly integrated BEPS solutions for facilities, such as hospitals, emergency management systems, etc. that need power in emergency and disaster situations. Further, the project team should consider how the development effort could support the development or use of additional standards, specifications, or protocols related to successful deployment of BEPS solutions as appropriate.

D. Application and Submission Information

1. Address to Request Application

Applications must be accessed and submitted electronically through GRANTS.GOV. General information for submitting applications through GRANTS.GOV can be found at

www.transit.dot.gov/howtoapply. A complete proposal submission consists of two forms and their supporting attachments. The Forms are (1) an SF-424 “Application for Federal Assistance” and (2) the supplemental form for the FY 2021 Standards Development – BEPS NOFO. Both forms are downloadable from GRANTS.GOV or the FTA website at <https://www.transit.dot.gov/funding/grants/BEPS>.

2. Content and Form of Application Submission

a. Proposal Submission

A complete proposal submission consists of the two forms and their supporting documents. The attachments shall provide a detailed project approach and proposed scope of work. A successful applicant must submit a final full application into FTA’s TrAMS system within 45 days of award.

The supplemental form and supporting documents must be added to the “Attachments” section of the SF-424. The application must include responses to all sections of the SF-424 Application for Federal Assistance and the supplemental form, unless indicated as optional. The information on the supplemental form will be used to determine applicant and project eligibility for the program, and to evaluate the proposal against the selection criteria described in Section E of this notice.

FTA will accept only one supplemental form per SF-424 submission. Applicants may attach additional supporting information to the SF-424 submission, including but not limited to a detailed project approach, the project background, a proposed scope of work and major tasks, a proposed timeline, proposed project budgets, technical information and approach, visual aids, excerpts from relevant planning documents, letters of support, or project narratives. Any supporting documentation must be described and referenced by file name in the appropriate response section of the supplemental form, or it may not be reviewed.

Information such as applicant name, Federal amount requested, and local match amount (if match is being proposed), may be requested on both the SF-424 and supplemental

form. Applicants must fill in all fields unless stated otherwise on the forms. If information is copied into the supplemental form from another source, applicants should verify that pasted text is fully captured on the supplemental form and has not been truncated by the character limits built into the form. Applicants should use both the “Check Package for Errors” and the “Validate Form” validation buttons on both forms to check all required fields on the forms and ensure that the Federal and local amounts specified are consistent.

b. Application Content

The SF-424 Application for Federal Assistance and the supplemental form will prompt applicants for the required information, including:

1. Applicant name.
2. Unique Entity Identifier (UEI) in SAM.gov. The Federal government will stop using the Data Universal Numbering System (DUNS) number to identify entities starting April 4, 2022.
3. Key contact information (including name, address, email address, and phone).
4. Congressional district(s) where project will take place.
5. Project information (including title, and an executive summary).
6. Project description (including attachments if necessary) and how it will (a) collect and analyze industry data and specifications for the development of interoperable BEPS standards; (b) demonstrate a plug and play BEPS solution; (c) develop interoperable BEPS standards; (d) collaborate with diverse stakeholders in the development of BEPS standards; and (e) approach to developing a guidebook and implementation guide to deploy BEPS solutions in communities during emergencies and disasters situations.
7. Information on any project partners, their role, and anticipated contributions.
8. A description of the technical, legal, and financial capacity of the applicant, its key personnel, and any partners.

9. A detailed project budget, specifying Federal and local share when applicable.

10. A detailed project timeline.

Applicants may also attach additional supporting information and other materials or information relevant to BEPS standards development such as letters of support from key stakeholders.

3. Unique Entity Identifier and System for Award Management (SAM)

Each applicant is required to: (1) be registered in SAM before submitting an application; (2) provide a valid unique entity identifier in its application; and (3) continue to maintain an active SAM registration with current information at all times during which the applicant has an active Federal award or an application or plan under consideration by FTA. FTA may not make an award until the applicant has complied with all applicable unique entity identifier and SAM requirements. If an applicant has not fully complied with the requirements by the time FTA is ready to make an award, FTA may determine that the applicant is not qualified to receive an award and use that determination as a basis for making a Federal award to another applicant. These requirements do not apply if the applicant has an exception approved by FTA or the U.S. Office of Management and Budget under 2 CFR 25.110(c) or (d). SAM registration takes approximately 3-5 business days, but FTA recommends allowing ample time, up to several weeks, for completion of all steps. For additional information on obtaining a unique entity identifier, please visit <https://www.sam.gov>.

4. Submission Dates and Times

Project proposals must be submitted electronically through GRANTS.GOV by 11:59 PM Eastern time on [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. GRANTS.GOV attaches a time stamp to each application at the time of submission. Proposals submitted after the deadline will only be considered under extraordinary circumstances not under the applicant's control. Mail and fax submissions will not be accepted.

FTA urges applicants to submit applications at least 72 hours prior to the due date to allow time to receive the validation messages and to correct any problems that may have caused a rejection notification. GRANTS.GOV scheduled maintenance and outage times are announced on the GRANTS.GOV website. Deadlines will not be extended due to scheduled website maintenance.

Within 48 hours after submitting an electronic application, the applicant should receive an email message from GRANTS.GOV with confirmation of successful transmission to GRANTS.GOV. If a notice of failed validation or incomplete materials is received, the applicant must address the reason for the failed validation, as described in the email notice, and resubmit before the submission deadline. If making a resubmission for any reason, include all original attachments regardless of which attachments were updated and check the box on the supplemental form indicating this is a resubmission.

Applicants are encouraged to begin the process of registration on the GRANTS.GOV site well in advance of the submission deadline. Registration is a multi-step process, which may take several weeks to complete before an application can be submitted. Registered applicants may still be required to take steps to keep their registration up to date before submissions can be made successfully: (1) registration in SAM is renewed annually, and (2) persons making submissions on behalf of the Authorized Organization Representative (AOR) must be authorized in GRANTS.GOV by the AOR to make submission.

5. Funding Restrictions

Funds available under this NOFO cannot be used to reimburse applicants for otherwise eligible expenses incurred prior to FTA issuing pre-award authority for selected projects.

Refer to Section C.3., Eligible Projects, for information on activities that are allowable. Allowable direct and indirect expenses must be consistent with the

Governmentwide Uniform Administrative Requirements and Cost Principles (2 CFR part 200) and FTA Circular 5010.1E.

6. Other Submission Requirements

Applicants are encouraged to identify scaled funding options in case funding is not available to fund a project at the full requested amount. If an applicant indicates that a project is scalable, the applicant must provide an appropriate minimum funding amount that will fund an eligible project that achieves the objectives of the program and meets all relevant program requirements. The applicant must provide a clear explanation of how the project budget would be affected by a reduced award. FTA may award a lesser amount regardless of whether a scalable option is provided.

All applications must be submitted via the GRANTS.GOV website. FTA does not accept applications on paper, by fax machine, email, or other means. For information on application submission requirements, please see Section D.1., Address to Request Application.

E. Application Review Information

1. Criteria

Projects will be evaluated on the responses provided in the supplemental form and the attached project summary. Additional information may be provided to support the responses; however, any additional documentation must be directly referenced on the supplemental form, including the file name where the additional information can be found. FTA will evaluate proposals based on the criteria described in this notice.

a. Key Personnel Experience and Organizational Capacity

Application should note the individuals who will be involved in the project and how the applicant will ensure they will have enough time to devote to the project. Additionally, applicant should discuss successful completion of similar or relevant projects – case studies, references, etc.

b. Proposer and proposal team subject matter expertise

Application should clearly demonstrate applicant knowledge in exportable power systems, battery electric public transit buses, transit industry (including facilities and operations), standards development, emergency management and electric system interoperability.

c. Knowledge of Standards, Standards Development

Application should provide evidence of applicant's experience developing and disseminating industry standards, particularly for the public transit industry. The proposal should detail the applicant's knowledge of general transit industry standards, general experience and knowledge of the transit standards development -including awareness of potential barriers or challenges to standard application and technology adoption.

d. Knowledge of Public Transit and Emergency Management Context and Needs

Applicants should provide evidence of knowledge of the public transit industry and the contexts, challenges, and resources of transit providers across the country. Applicants should also clearly demonstrate understanding of emergency management needs and critical facilities with which BEPS must have interoperability.

e. Project approach

Projects will be evaluated on overall project approach including proposed workplan tasks, schedule, and interim deliverables. In assessing whether the proposed implementation plans are reasonable and complete, FTA will review the proposed project work plan, including all necessary project milestones and the overall project timeline. Funds must be obligated in a cooperative agreement no later than September 30, 2022. Applicants must demonstrate their ability to enter into the cooperative agreement by that date and begin project activities shortly thereafter.

f. Technical, Legal, and Financial Capacity

The applicant must demonstrate the financial and organizational capacity and managerial experience to successfully oversee and implement this project. FTA may review relevant

oversight assessments and records to determine whether there are any outstanding legal, technical, or financial issues with the applicant that would affect the outcome of the proposed project. Applicants with outstanding legal, technical, or financial compliance issues from an FTA compliance review or Federal Transit grant-related Single Audit finding must explain how corrective actions will mitigate negative impacts on the proposed project.

For applications that include named project partners, FTA will also consider the technical, legal, and financial capacity of the proposed partners.

2. Review and Selection Process

A technical evaluation committee will evaluate proposals based on the published evaluation criteria. Members of the technical evaluation committee may request additional information from applicants, if necessary. Based on the review of the technical evaluation committee, the FTA Administrator will determine the final selection of projects for program funding. In making selections, FTA may consider geographic diversity, and the applicant's receipt of other competitive awards. FTA may also consider capping the amount a single applicant may receive.

3. Performance and Integrity

Prior to making an award, FTA is required to review and consider any information about the applicant that is in the FAPIIS accessible through SAM. An applicant may review and comment on any information about itself that a Federal awarding agency previously entered. FTA will consider any comments by the applicant, in addition to the other information in the designated integrity and performance system, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in the Office of Management and Budget's Uniform Requirements for Federal Awards (2 CFR 200.205).

F. Federal Award Administration Information

1. Federal Award Notices

FTA will announce the final project selections on the FTA website. Due to funding limitations of \$1,000,000 in total, applicants that are selected for funding may receive less than the amount originally requested. In those cases, applicants must be able to demonstrate that the proposed projects are still viable and can be completed with the amount awarded.

2. Administrative and National Policy Requirements

a. Pre-Award Authority

At the time the project selections are announced, FTA may extend pre-award authority for the selected projects. There is no blanket pre-award authority for these projects before announcement. FTA will issue specific guidance to recipients regarding pre-award authority at the time of selection. FTA does not provide pre-award authority for competitive funds until projects are selected, and even then, there are Federal requirements that must be met before costs are incurred. For more information about FTA's policy on pre-award authority, please see the most recent Apportionments, Allocations and Program Information Notice at <https://www.transit.dot.gov>.

b. Cooperative Agreement Requirements

If selected, awardees will apply for a cooperative agreement through FTA's Transit Award Management System (TrAMS). Successful applicants must be prepared to submit a complete statement of work and application in TrAMS within 45 days of notification of award in order to obligate funds no later than September 30, 2022. All recipients must follow the requirements of FTA Circular 6100.1E. Technical assistance regarding these requirements is available from FTA.

c. Buy America

FTA requires that all capital procurements meet FTA's Buy America requirements (49 U.S.C. 5323(j) and 49 CFR part 661), which require that all iron, steel, and manufactured goods

be produced in the United States, and set minimum domestic content and final assembly requirements for rolling stock.

d. Standard Assurances

If an applicant receives an award, the applicant must assure that it will comply with all applicable Federal statutes, regulations, executive orders, directives, FTA circulars, and other Federal administrative requirements in carrying out any project supported by the FTA award. The applicant acknowledges that it will be under a continuing obligation to comply with the terms and conditions of the agreement issued for its project with FTA. The applicant understands that Federal laws, regulations, policies, and administrative practices might be modified from time to time and may affect the implementation of the project. The most recent Federal requirements will apply to the project unless FTA issues a written determination otherwise. The applicant must submit the most recent FTA Certifications and Assurances before receiving an award if it does not have current certifications on file.

e. Data Access and Data Sharing

Recipients, including a recipient that is an institution of higher education, will be subject to the restriction on publishing subject data contained in Section 18(b) of the latest version of FTA's master agreement. The latest version of FTA's master agreement is version 29, effective February 7, 2022, available at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/2022-02/FTA-Master-Agreement-v29-2022-02-07.pdf>. A recipient must receive written approval from FTA prior to publishing or presenting subject data in any form. FTA must approve the BEPS and any other standards or guidelines developed under this NOFO before that information can be published. A recipient should consult with its FTA Project Manager prior to accepting an award to discuss any plan for external communications about the project.

FTA seeks to improve public transportation for America's communities by sharing digital data or source code collected or developed through its research with the public. This allows research organizations, transit agencies, and other stakeholders to learn from and expand upon

the insights developed from FTA-funded research. Any standards, guidance, tools, or software developed as a part of this solicitation will be evaluated by FTA for the potential to be shared for use by public transportation agencies and others.

3. Reporting

Post-award reporting requirements include the electronic submission of Federal Financial Reports and Milestone Progress Reports in FTA's electronic grants management system.

Applicants should include any goals, targets, and indicators referenced in their application in the Executive Summary of the TrAMS application.

As part of completing the annual certifications and assurances required of FTA grant recipients, a successful applicant must report on the suspension or debarment status of itself and its principals. If the award recipient's active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of an award made pursuant to this Notice, the recipient must comply with the Recipient Integrity and Performance Matters reporting requirements described in Appendix XII to 2 CFR part 200.

G. Federal Awarding Agency Contacts

For further information concerning this notice, please contact Raj Wagley, in the FTA Office of Infrastructure, Safety and Asset Innovation, by phone at 202-366-5386, or by e-mail at raj.wagley@dot.gov. A TDD is available for individuals who are deaf or hard of hearing at 800-877-8339. In addition, FTA will post answers to questions and requests for clarifications on FTA's website at <https://www.transit.dot.gov/funding/grants/BEPS>. To ensure applicants receive accurate information about eligibility or the program, applicants are encouraged to contact FTA directly, rather than through intermediaries or third parties, with questions. FTA staff may also conduct briefings on the competitive grants selection and award process upon request.

For issues with GRANTS.GOV, please contact GRANTS.GOV by phone at 1-800-518-4726 or by e-mail at support@grants.gov.

H. Other Information

This program is not subject to Executive Order 12372, “Intergovernmental Review of Federal Programs.”

Nuria I. Fernandez,
Administrator.

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